



The State of New Hampshire  
**Department of Environmental Services**



**Michael P. Nolin**  
Commissioner

January 28, 2004  
**Letter of Deficiency**  
DSP#04-007

Stoddard Main Company  
Prudential, Mrs. Martha Foster  
633 Elm Street  
Milford, NH 03055

RE: Robb Reservoir Dam #223.02, Stoddard

Dear Mrs. Foster:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 24, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

Two-foot high flashboards, which had previously been removed to repair failed concrete piers were reinstalled without the replacement of the concrete piers. It is unclear as to what design was used for the placement of these flashboards as there was no design submitted to our office. It should be noted that there is an existing design on a plan sheet from the New Hampshire Fish and Game Department labeled "ROBB RESERVOIR STODDARD, NH." Dated September 1951, which was supplied to the owners in November 1997;

2. Brush and tree growth was observed in the following locations;
  - a. Along the upstream right earth embankment (brush);
  - b. Along the entire right downstream face of the dam (brush & tree);
  - c. Within 15 feet of the toe of the right downstream right earth embankment (brush & tree);
  - d. Within 15 feet of the left concrete abutment (tree);
3. Previous brush and tree removal debris was placed on the right downstream abutment;
4. There was concrete cracking at the left end of the concrete walkway above the left concrete stoplog pier/abutment;
5. There was a crack in the concrete near the water line in the left concrete stoplog pier/abutment; and
6. Standing water was observed at the toe of the right embankment adjacent to the outflow channel. It has been indicated in past inspections that this area was seepage from the embankment. However, at the time of this inspection this area appeared to be overflow/backflow from the adjacent outflow river. It is likely at times of high water backflow travels through this area and exits through what was the original outflow channel, which was abandoned in the 1953 reconstruction of the dam.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

**April 1, 2004:**

1. Submit, in writing, a design that indicates when the failure of the flashboards will occur if they have not been constructed as was designed in the 1951 State of New Hampshire, Fish and Game Plan;

**October 1, 2004:**

2. Remove the brush and tree growth in the following locations
  - a. Along the upstream right earth embankment (brush);
  - b. Along the entire right downstream face of the dam (brush & tree);
  - c. Within 15 feet of the toe of the right downstream right earth embankment (brush & tree);
  - d. Within 15 feet of the left concrete abutment (tree);
3. Remove the previous brush and tree removal debris from the embankment and maintain a hardy erosion resistant cover on the entire earth embankment;

**On a Continuous Basis:**

4. Monitor and repair as necessary the concrete cracking at the left end of the concrete walkway above the left concrete stoplog pier/abutment. Also, update and reference an inspection schedule in the attached operational plan;
5. Monitor and repair as necessary the crack in the concrete near the water line in the left concrete stoplog pier/abutment. Also, update and reference an inspection schedule in the attached operational plan; and
6. Monitor the standing water that was observed at the toe of the right embankment adjacent to the outflow channel. Additionally, at the next significant storm event observe the condition at the toe of the right earth embankment and report to our office, in writing, as to whether the outflow channel backwater exits in this area.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate

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written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the cover page.

Sincerely,

A handwritten signature in black ink is written over the word "COPY", which is printed in large, bold, black capital letters.

Dale F. Guinn, P.E.  
Dam Safety Engineer

Attachments Guideline for an O&M plan, DB8, DB13  
cc: Gretchen Rule ✓  
Town of Stoddard  
Certified # 7000 1670 0000 0586 2794  
DFG/was/h:/safety/wendy/lod/223-02lod.doc